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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,353	04/13/2004	Phillip C. Watts		4721

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EXAMINER

HALL, ASHA J

ART UNIT	PAPER NUMBER
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1795

MAIL DATE	DELIVERY MODE
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02/04/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/823,353

Applicant(s)

WATTS, PHILLIP C.

Examiner

Asha Hall

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION***Drawings***

1. The drawings are objected to because drawings are depicted in a grayscale background. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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3. Claims 1, 4, and 5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

For example according to claim 1, the Applicant states "the elimination of element sorting for mechanical tolerance build up between elements of a multiple in plane thermoelectric module implementation of an electric generator by using automatic self locating mechanical features to accommodate part difference" the manner and process of making and using the elimination of element sorting as to enable any person skilled in the art to make and use the same is not stated in the specification.

As for claim 4, the Applicant states "Minimizing the physical fluid connections by multiple in plane thermoelectric module assembly from features that supply and exit fluids or gases" the manner and process of making and using the minimized fluid as to enable any person skilled in the art to make and use the same invention is not stated in the specification.

With respect to claim 5, the Applicant states "By integrating the cool and hot fluid or gas ports as features to supply adjacent blocks corresponding fluids from within the element that the thermal losses due to supply hoses are eliminated as supply hoses are not required between blocks" the manner and process of making and using the cool and hot fluid or gas to supply fluid or gas to the adjacent block with the elimination of supply

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hoses as to enable any person skilled in the art to make and use the same is not stated in the specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1 and 4-7 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

For example according to claim 1, the Applicant states "the elimination of element sorting for mechanical tolerance build up between elements of a multiple in plane thermoelectric module implementation of an electric generator by using automatic self locating mechanical features to accommodate part difference" does not particularly point out the subject matter or statutory class of which it pertains to.

As for claim 4, the Applicant states "Minimizing the physical fluid connections by multiple in plane thermoelectric module assembly from features that supply and exit fluids or gases" does not particularly point out the subject matter or statutory class of which it pertains to.

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With respect to claim 5, the Applicant states "By integrating the cool and hot fluid or gas ports as features to supply adjacent blocks corresponding fluids from within the element that the thermal losses due to supply hoses are eliminated as supply hoses are not required between blocks" does not particularly point out the subject matter or statutory class of which it pertains to.

In regard to claim 6, the Applicant states "Exact mechanical Port alignment to supply and return manifolds is eliminated by o-ring enabled slip joints in the ports of the hot and cold blocks that allow for multi-axis mechanical differences" does not particularly point out the subject matter or statutory class of which it pertains to.

As to claim 7, the Applicant states "Spring compressed elements allow for thermal expansion and contraction while allowing for simple servicing (adding or replacing) elements without mechanical fastener adjustments" does not particularly point out the subject matter or statutory class of which it pertains to.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1 and 4-7 are rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a specific and substantial asserted utility or a well established utility.

For example according to claim 1, the Applicant states "the elimination of element sorting for mechanical tolerance build up between elements of a multiple in

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plane thermoelectric module implementation of an electric generator by using automatic self locating mechanical features to accommodate part difference" the manner and process of making and using the elimination of element sorting is not supported by a specific and substantial well established utility, wherein claim 1 pertains to an abstract idea. Furthermore, the applicant fails to point out the statutory class (i.e. the invention should be designated as either: new and useful process, machine, manufacture or composition of matter or any new and useful improvement thereof).

As for claim 4, the Applicant states "Minimizing the physical fluid connections by multiple in plane thermoelectric module assembly from features that supply and exit fluids or gases" the manner and process of making and using the minimized fluid is not supported by a specific and substantial well established utility. Furthermore, the applicant fails to point out the statutory class of which the invention pertains to.

With respect to claim 5, the Applicant states "By integrating the cool and hot fluid or gas ports as features to supply adjacent blocks corresponding fluids from within the element that the thermal losses due to supply hoses are eliminated as supply hoses are not required between blocks" the manner of using the cool and hold fluid or gas ports is not supported by a specific and substantial well established utility Furthermore, the applicant fails to point out the statutory class of which the invention pertains to.

In regard to claim 6, the Applicant states "Exact mechanical Port alignment to supply and return manifolds is eliminated by o-ring enabled slip joints in the ports of the hot and cold blocks that allow for multi-axis mechanical differences" the manner of using the o-ring enabled slip joints is not supported by a specific and substantial well

established utility. Furthermore, the applicant fails to point out the statutory class of which the invention pertains to.

As to claim 7, the Applicant states "Spring compressed elements allow for thermal expansion and contraction while allowing for simple servicing (adding or replacing) elements without mechanical fastener adjustments the manner of using the spring compressed elements is not supported by a specific and substantial well established utility. Furthermore, the applicant fails to point out the statutory class of which the invention pertains to.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Morales (US 3,240,261).

As to claim 2, Morales discloses an integrated generator (col. 11; lines: 14-17) consisting of any number of in plane thermoelectric modules (i.e. one in plane as shown in Figure 1), assembled between hot or cold fluid (col. 2; lines: 24-29).

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10. Claim 3 rejected under 35 U.S.C. 102(b) as being anticipated by di Priolo et al (US 5,322,042).

With respect to claim 3, di Priolo et al. discloses a fluid circulation system that separates air from the circulation fluid enabling heating and cooling components to be added and primed easily (col. 2; lines: 44-49).

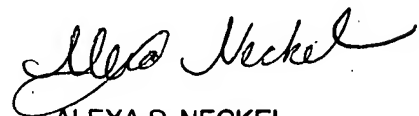
Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asha Hall whose telephone number is 571-272-9812. The examiner can normally be reached on Monday-Thursday 8:30-7:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on 571-272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJH



ALEXA D. NECKEL
SUPERVISORY PATENT EXAMINER